Amendments to the Claims:

This listing of all pending claims (including withdrawn claims) will replace all prior versions, and listings, of claims in the application. Cancelled and not entered claims are indicated with claim number and status only. The claims show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Listing of Claims:

1. (Currently Amended) An optical transmission system comprising:

an end station including a monitor instruction sending unit for sending a monitor instruction for monitoring an operating condition of a repeater, and an operating condition recognizing unit for receiving a response signal from the repeater and recognizing the operating condition; and

a repeater including:

a filtering unit filtering the monitor instruction and the response signal;

a monitor control unit monitoring ~~an~~ the operating condition of the repeater in response to the monitor instruction and generating response information that is a result of monitoring;

a pump unit applying a pump light to an optical fiber transmission medium and enabling an optical amplification using the optical fiber transmission medium as an amplifying medium;

a regeneration control unit performing a regeneration control of the response signal sent by another repeater to thereby generate a regenerated signal;

a modulation control unit modulating the pump light by the response information or the regenerated signal to ~~thereby~~ generate the response signal, and modulating another pump light by the response information or the regenerated signal to generate the response signal, said another pump light being in the direction reverse to a pumping direction, so as not to cause forward Raman amplification and to be receivable by an adjoining repeater, when the response signal travels in a direction identical to that in which an optical main signal travels; and

a photocoupler unit that is connected to the optical fiber transmission medium and sends the response signal in a direction identical to or reverse to that in which ~~an~~ the optical main signal travels.

2. (Original) The optical transmission system according to claim 1, wherein the pump unit performs backward Raman amplification.

3. (Canceled)

4. (Original) The optical transmission system according to claim 1, wherein the regeneration control unit ceases the regeneration control when the modulation control of the pump light is based on the response information.

5. (Currently Amended) A repeater for an optical transmission comprising:

a filtering unit filtering a monitor instruction for monitoring an operating condition of the repeater and a response signal;

a monitor control unit monitoring ~~an~~ the operating condition of the repeater in response to the monitor instruction and generating response information that is a result of monitoring;

a pump unit applying a pump light to an optical fiber transmission medium and enabling an optical amplification using the optical fiber transmission medium as an amplifying medium;

a regeneration control unit performing a regeneration control of the response signal sent by another repeater to thereby generate a regenerated signal;

a modulation control unit modulating the pump light by the response information or the regenerated signal to ~~thereby~~ generate the response signal, and modulating another pump light by the response information or the regenerated signal to generate the response signal, said another pump light being in a direction reverse to a pumping direction, and may not cause forward Raman amplification and may be receivable by an adjoining repeater, when the response signal travels in a direction identical to that in which an optical main signal travels; and

a photocoupler unit that is connected to the optical fiber transmission medium and sends the response signal in a direction identical to or reverse to that in which ~~an~~ the optical main signal travels.

6. (Original) The repeater according to claim 5, wherein the pump unit performs backward Raman amplification.

7. (Canceled)

8. (Original) The repeater according to claim 5, wherein the regeneration control unit ceases the regeneration control when the modulation control of the pump light is based on the response information.